



Intraocular manifestations of primary lymphoma of the central nervous system (clinical cases) (ID 56541)

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Patients & Methods: We observed 23 patients with acute retinal necrosis syndrome, in 2 of them in the course of treatment and examination was detected the primary CNS lymphoma

Results: Investigation of the humoral immune response to infectious antigens showed serological markers of reactivation of herpes virus group. Against the background of the assigned antiviral and corticosteroid therapy was obtained a positive effect. Joining neurological complaints and the subsequent examination, including brain MRI and stereotactic biopsy of the tumor allowed to diagnose primary CNS lymphoma.

Case 1:

- **Patient R., 61 years.** Patient was treated in the institute with a diagnosis: OU Acute Retinal Necrosis. The diagnosis was not verified for sure. The patient was directed for hematologist examination, also positron emission tomography and CT and MRI scans of the brain and the lung was appointed.

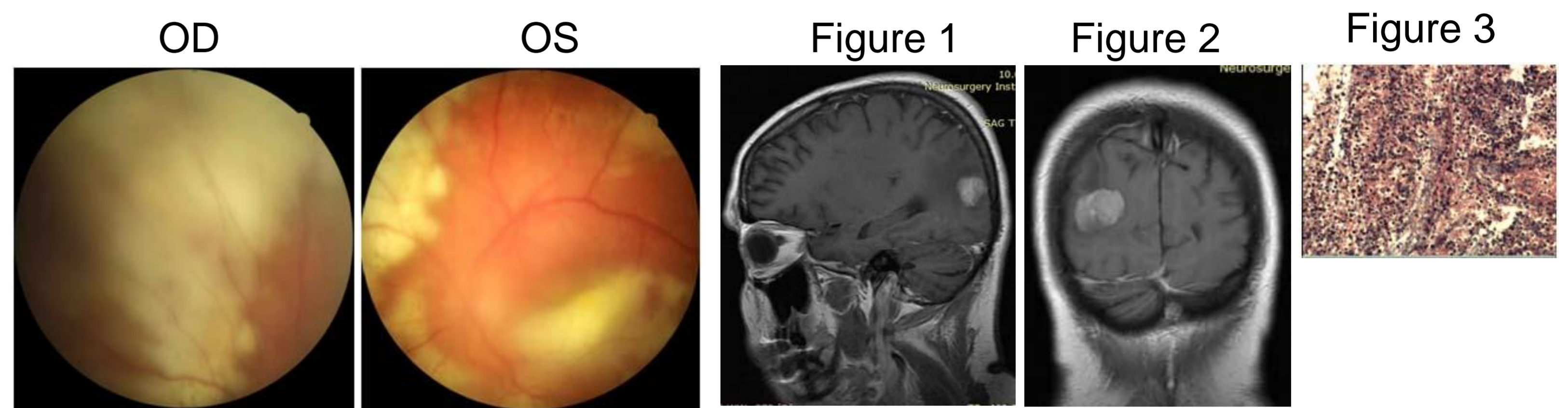
Hematologist conclusion (based on trepanobiopsy). No evidence of lymphoma lesion was found within the investigated material.

Chest CT: lymphadenopathy is not present.

Magnetic resonance imaging: right occipital region neoplasm, alterations in the right posterior frontal -parietal region, small areas in the left parietal region and in the posterior temporal region on the right, correspond to the lymphoma (Figure 1, 2).

The operation "Stereotactic biopsy of the right parietal lobe tumor " was performed. Conclusion: a low-grade malignant tumor (Figure 3).

The final diagnosis: primary lymphoma of the central nervous system



Infection	Serum antibodies	result	ELISA method (norm)
Herpes simplex virus 1, 2	IgG	3,2	< 0,18
	IgM	negative	< 0,31
Herpes simplex virus 1	IgG antibody to early antigen	0,36	< 0,35
Herpes simplex virus 2	IgG antibody to early antigen	negative	< 0,35
Cytomegalovirus	IgG	3,4	< 0,36
	IgM	negative	< 0,35
	IgG -antibody to immediate early antigen	2,3	< 0,35
Epstein-Barr virus	IgG - antibody to nuclear antigen	1,8	< 0,18
	IgG - antibody to early antigen	negative	< 0,38
	IgM - antibody to capsid antigen	negative	< 024

Case 2:

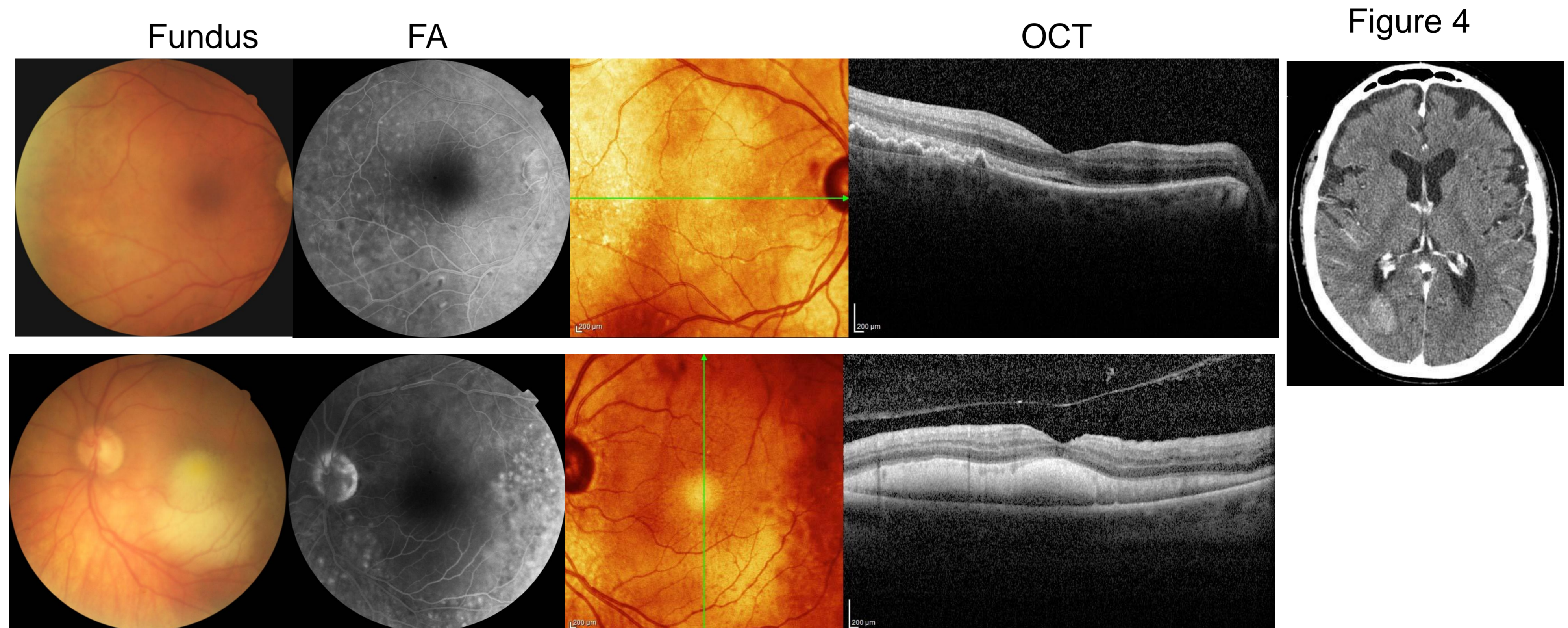
- **Patient R., 67 years.** Entered the hospital with the diagnosis: OU Acute Retinal Necrosis. According to the atypical ophthalmoscopic picture and disease development, the patient was directed to hematologist examination (in order to exclude the lymphoproliferative process). Also brain CT was prescribed.

Hematologist conclusion : No evidence for systemic lymphoma was obtained (according to trepanobiopsy).

Brain CT: the intracerebral tumor in paraventricular regions of the right occipital lobe is visualized (Figure 4).

The operation "Stereotactic biopsy of the right parietal lobe tumor" was performed. Conclusion: The morphological picture and the immunophenotype of the tumor correspond to diffuse large-cell B-cell CNS lymphoma.

The final diagnosis: primary lymphoma of the central nervous system



Infection	Serum antibodies	result	ELISA method (norm)
Herpes simplex virus 1, 2	IgG	3,1	< 0,18
	IgM	negative	< 0,31
Herpes simplex virus 1	IgG antibody to early antigen	0,8	< 0,35
Herpes simplex virus 2	IgG antibody to early antigen	negative	< 0,35
Cytomegalovirus	IgG	2,4	< 0,36
	IgM	negative	< 0,35
	IgG -antibody to immediate early antigen	negative	< 0,35
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	IgG - antibody to early antigen	negative	< 0,38
	IgM - antibody to capsid antigen	negative	< 024

Comments: These two cases are of interest due to the fact that patients had bilateral lesion of the type of acute retinal necrosis syndrome.

Conclusions: Thus, ocular manifestations of primary CNS lymphoma clinical picture may resemble acute retinal necrosis syndrome; at the bilateral and atypical course of acute retinal necrosis syndrome patients should have a total survey involving chorioretinal biopsy and brain MRI.